ABSTRACT

It is not possible to store heat of a domestic hot water supply level at a high density. If thermal storage temperature is T, variation in enthalpy in a chemical reaction is ΔH, variation in entropy is ΔS, and variation in free energy is ΔG, a thermal storage material satisfying a relationship of $T\Delta S \geq \Delta G$ is used under a condition of $\Delta H > 0$ so as to promote a reaction for putting the thermal storage material in a thermal storage reaction portion in an energy storing state by having supplemental energy added by an electrode portion when putting the thermal storage material in the energy storing state by decomposing or separating it.